



**MONETARY AND
CAPITAL MARKETS**

Rethinking Macroprudential Buffers

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Erlend Nier

Monetary and Capital Markets Department, IMF

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International Momentum Towards More Releasable Capital Buffers

- Especially since the **COVID-19 experience** – that highlighted the benefits of releasable capital, including the Countercyclical capital buffer (CCyB).
- In October 2022, the **Basel Committee (BCBS)** announced it sees benefits in countries adopting a **positive cycle-neutral CCyB** – even as this is not mandatory ([Newsletter](#)).
- In July 2023, a novel element considered for a review of the **Basel Core Principles BCBS (2023)**, is for laws and regulations to enable supervisors to require banks to have **releasable capital (buffers)** – could be CCyB or other releasable buffers.
- Positive neutral rates of the CCyB have been recommended in **IMF FSAPs in several countries** – in 2023 including in Turkey, Jordan, Sweden, Finland.

Several Countries Already Have a Positive Neutral Level for the CCyB

Table 1. Countries with a positive neutral CCyB rate

| | | | |
|--------------------------------|-------|-----------------------------|------|
| Australia | 1 % | Georgia | 1 % |
| Czech Republic | 1 % | Lithuania | 1 % |
| Cyprus | 0.5 % | New Zealand | 1.5% |
| Estonia | 1 % | Netherlands | 2 % |
| Hong Kong* | 1 % | Sweden | 2 % |
| Ireland | 1.5% | UK | 2 % |

* [Planned transition in 2024.](#)

Overview

- Lack of capital buffers through the COVID-19 crisis
- Case for positive neutral rates – policy, theory, and evidence
- Operating a positive neutral framework
 - ▶ When to start building the buffer?
 - ▶ To what level?
 - ▶ When to relax?
- Relationship with other buffers

Lack of Releasable Buffers

CCyB Often the Only Buffer That Can be Released

Countercyclical Capital Buffer (CCyB)

- Buffer can be **released**, to help absorb losses and maintain credit.
- Buffer can vary from 0 (not activated) to more than 2.5 percent of RWA.
- Buffer up to 2.5 triggers reciprocity from Basel member.

Capital Conservation Buffer (CCoB)

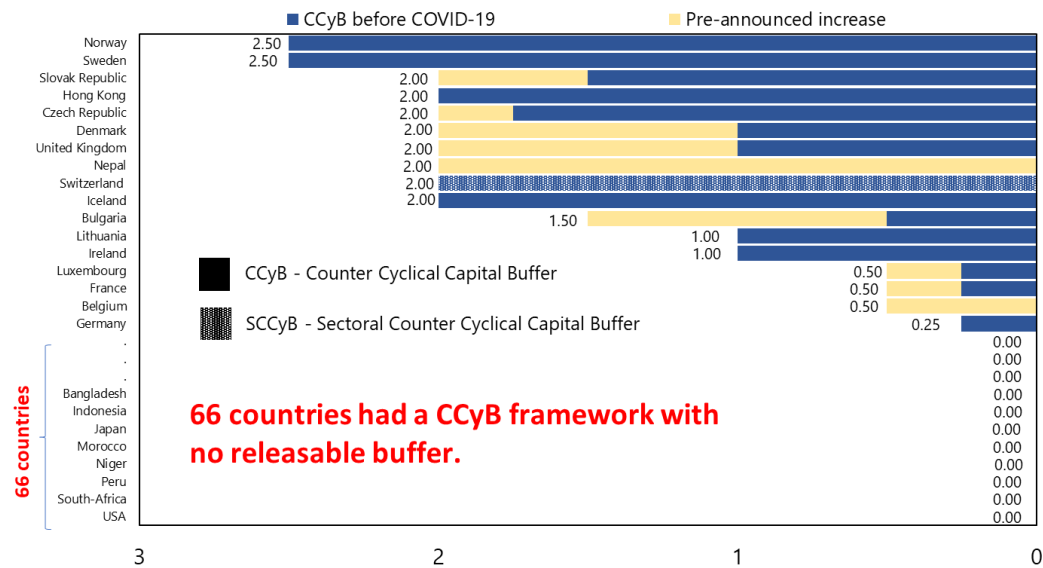
- Creates a **usable buffer (2.5 percent of RWA)**; not meant to be released.
- Usage comes with **conditions** which banks are likely to want to avoid.

Systemic Risk Buffer (SRB)

- Best known in the **EU framework**, but can be used elsewhere.
- Has typically covered risks in the **structural dimension** (i.e., TBTF), and should then not be released, but can be applied to time-varying risks.

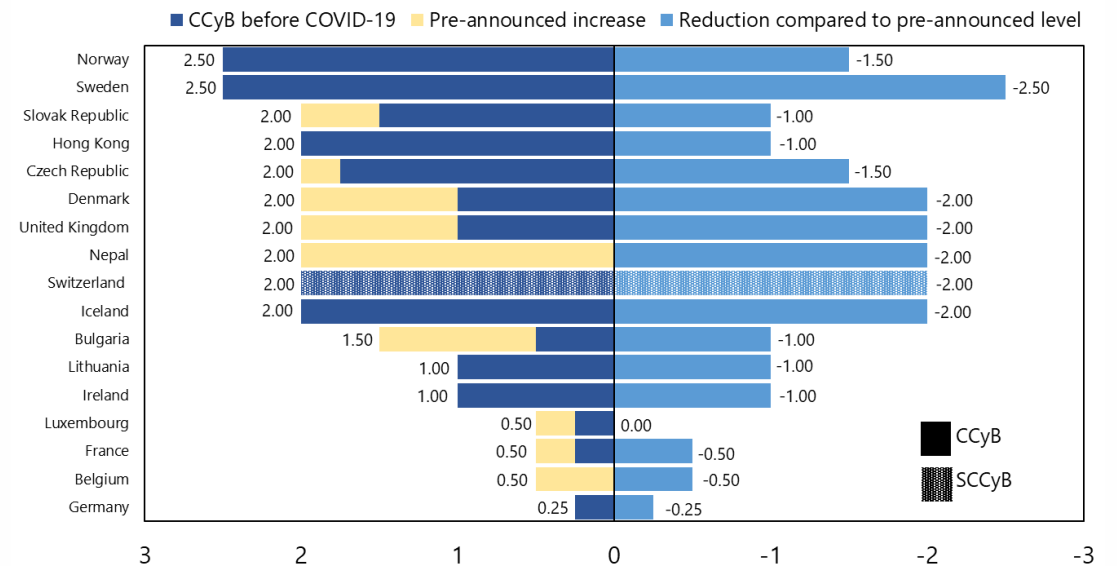
More Countries Would Have Benefitted from Releasable Buffers at the Start of the Pandemic.

CCyB level in the run up to the COVID-19 pandemic
(In Percentage Points)



Sources: IMF Policy Tracker, MCM FR's database, Yale Program on Financial Stability, country authorities' websites, IMF MP survey, staff calculations.

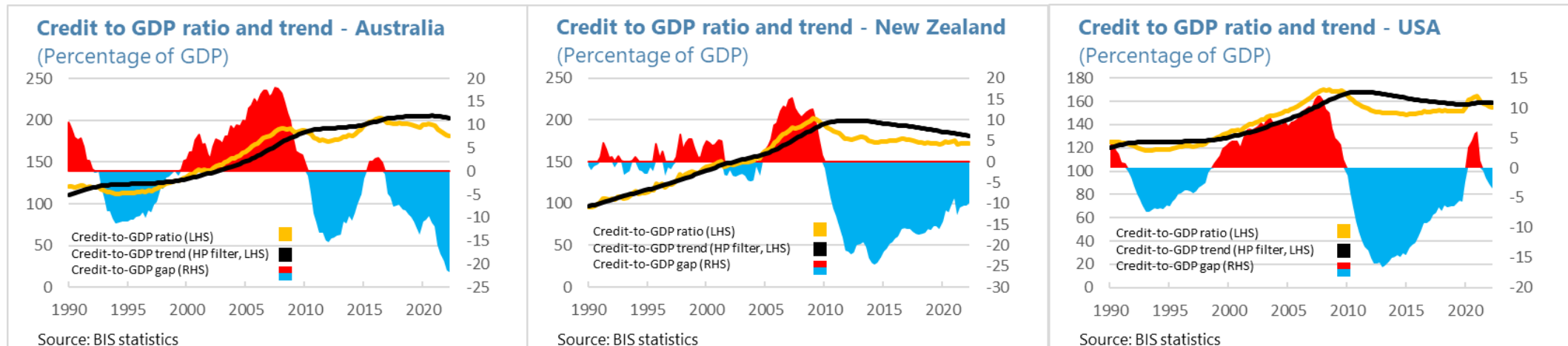
Relaxation of CCyB in response to COVID-19
(In Percentage Points)



Sources: IMF Policy Tracker, MCM FR's database, Yale Program on Financial Stability, country authorities' websites, IMF MP survey, staff calculations.

Focus on Credit Gap Can Lead to Lack of Buffers

- The Basel guidance [BCBS \(2010\)](#) refers to activating and increasing the buffer in response to “excessive credit growth”, as measured by the credit-to-GDP gap.
- But: this gap can stay negative for an extended period of time, leading to a lack of buffer.



Case for Positive Neutral Buffers

The Positive Neutral CCyB — Policy Perspective

- A positive neutral capital buffer recognizes that it is (very) difficult to predict periods of aggregate stress.
 - ▶ A positive neutral level acknowledges the difficulty of making real time assessment of crisis risks using early warning indicators [BoE \(2019\)](#) (or any other tool).
 - ▶ The pandemic episode served as a reminder that external shocks can occur without a prior period of excessive credit ([BCBS 2022](#)).
- The positive neutral rate offers a baseline level of protection against aggregate stresses.
 - ▶ Many policymakers regret not having built up buffers ahead of the pandemic that would have provided “policy space” for the release [BCBS 2022](#).
 - ▶ A positive neutral level is a useful starting point when higher rates are needed at the peak of the cycle. [BoE \(2019\)](#)

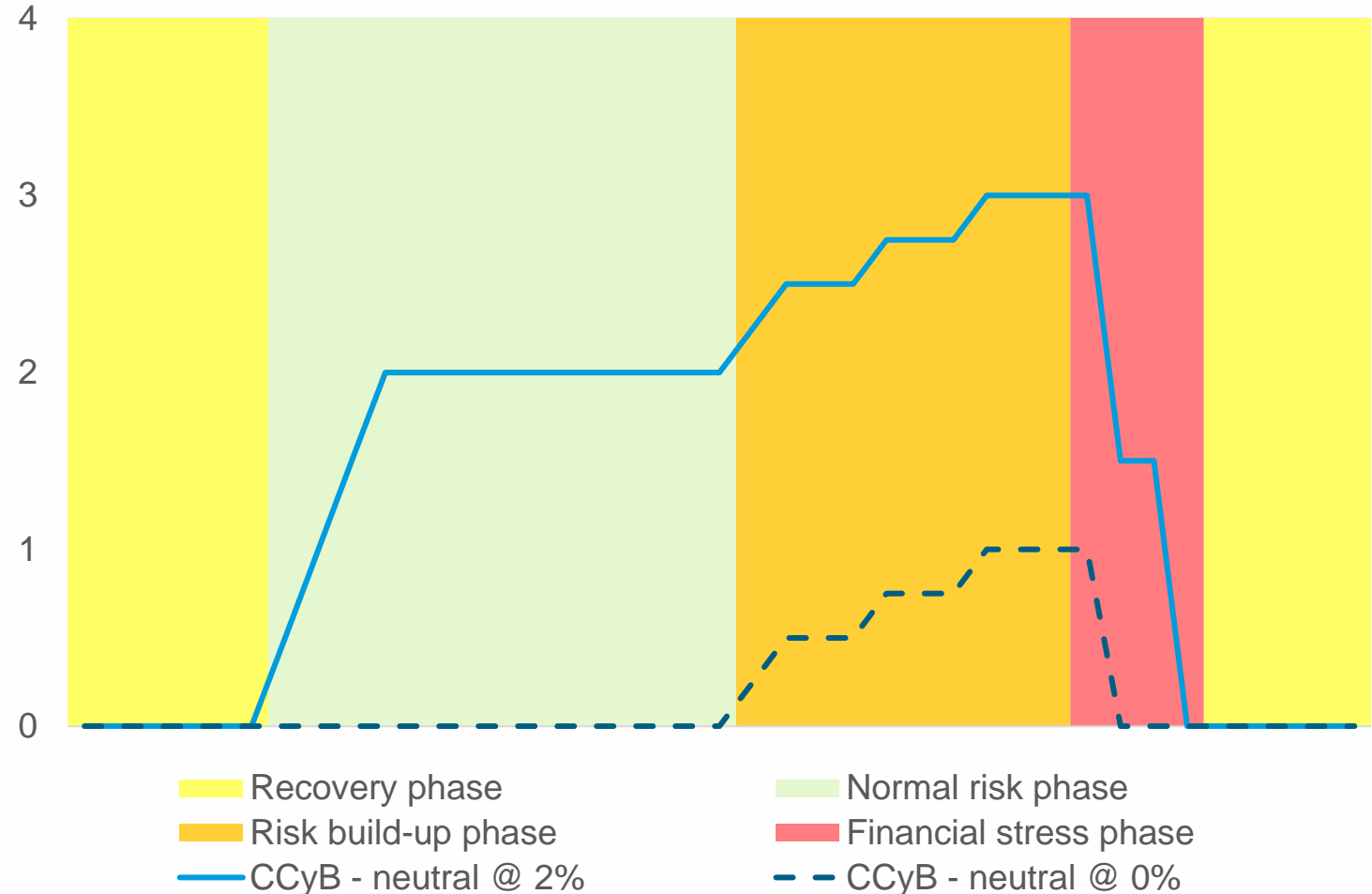
The Positive Neutral CCyB—Theory and Evidence

- Theory points to the benefits of maintaining releasable capital buffers in normal times [Lang and Menno \(2023\)](#).
 - ▶ A gradual increase in capital requirements has small effects on credit only through a “pricing” channel.
 - Social costs of building the buffer can be low.
 - ▶ A release of the capital requirement when binding can have an effect through a “quantity” channel that is an order of magnitude larger.
- Evidence from the pandemic confirms that releasing capital buffers can support lending through periods of stress. [BCBS \(2022\)](#), [BCBS \(2022\)](#), [BCBS \(2021\)](#), [Couaillier et al. \(2022 a\)](#),
 - ▶ Releasing capital buffers can create additional “headroom” for banks, enabling them to continue lending.
 - ▶ Encouraging banks to “use” capital conservation and stress capital buffers was less effective than when buffers were explicitly released, [Couaillier and others \(2022b\)](#), [Mathur and others \(2023\)](#), [Berrospide et al. \(2021\)](#).
 - ▶ Earlier evidence based on the GFC experience (Spain and Slovenia) also supports effectiveness of release: [Jimenez et. al. \(2017\)](#), [Sivec et. al. \(2022\)](#).
- Long term costs of permanently higher capital appear small, although adjustment costs can be larger. [BCBS \(2010\)](#), [\(2019\)](#), [Elliot et. al. \(2012\)](#), [Gambacorta and Shin \(2016\)](#) and [Gropp and others 2018](#)

Operationalizing the Framework

Positive Neutral CCyB: Building up Capital Unless Banks are Capital Constrained

- Release when supply of credit to the economy is constrained by capital, as a result of solvency stress.
 - ▶ Indicators: Incipient or expected solvency stress.
- Build-up to neutral level starts when the supply of credit is not (no longer) constrained by capital requirements.
- Early warning indicators (including credit gaps), growth-at-risk, stress tests, can signal increases beyond the neutral level.



Pace of Building up the CCyB Should Reflect Benefits and Adjustment Costs

- Assess existing stock vulnerabilities
 - If high, more urgent need for additional resilience
- Assess whether lending is constrained by capital
 - Avoid build-up at a pace that weighs on the provision of credit to the real economy
- Useful to condition on:
 - Level of voluntary buffers
 - Banks' profitability
 - Lending surveys

Net Benefit can be Positive if Monetary Policy Tightens

Net benefits of building capital buffers can be positive when monetary policy tightens:

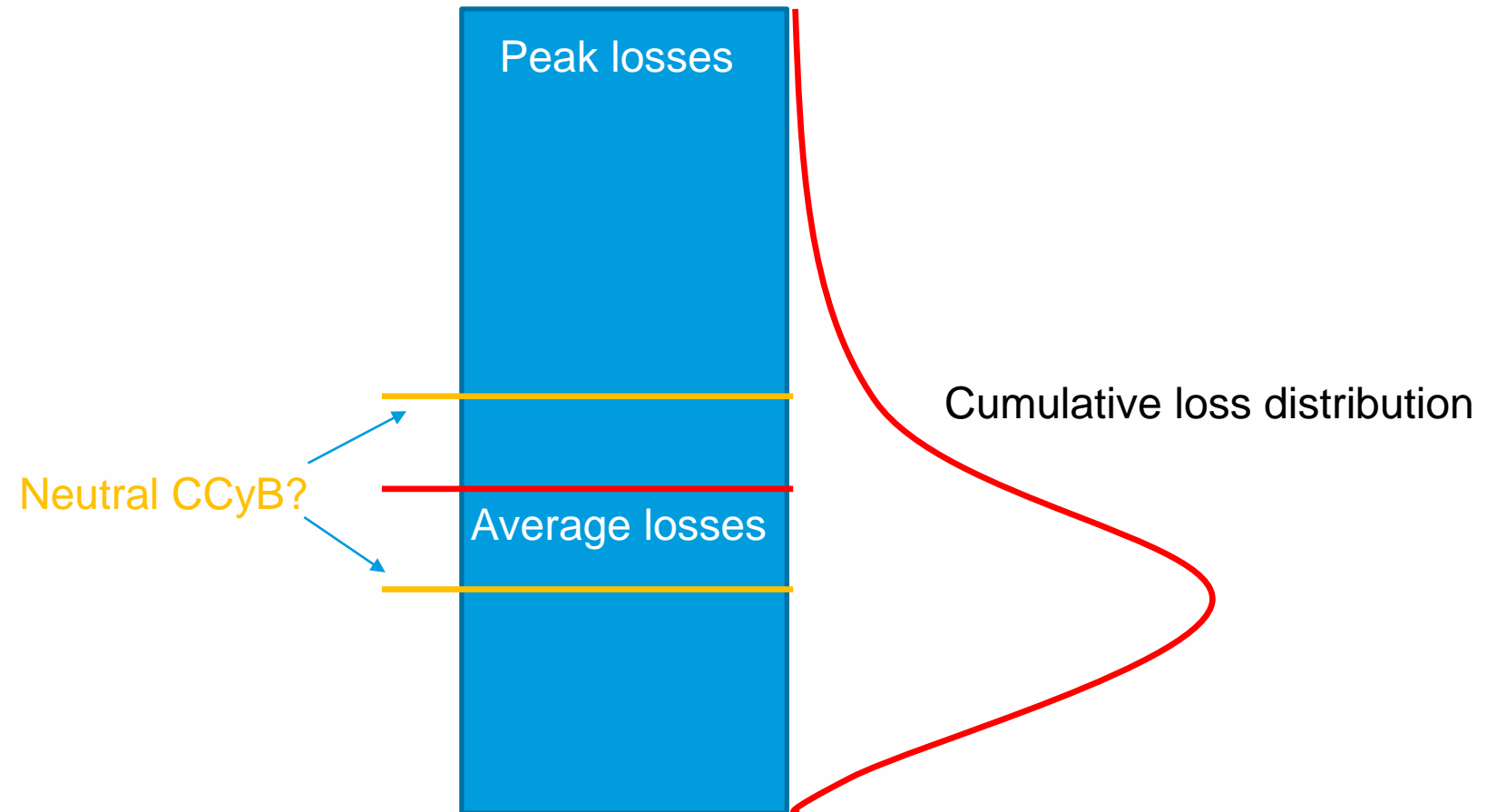
- Buffers help build resilience against vulnerabilities that can materialize when rates rise.
 - Higher policy rates can increase the risk of borrowers defaulting in future, increasing the benefit of capital buffers.
- Higher policy rates also boost margins initially, as pass-through of policy rates to deposit rates is typically incomplete or slow.
 - Higher profits reduce the cost of building buffers from retained earnings.
- Excessive tightening should be avoided.
 - Increases can be made conditional on the absence of signs that supply of credit is capital-constrained.

Approaches for Deciding the Size of the Neutral Rate

Past losses and stress tests can inform calibration

If buffer is managed actively, neutral rate can anticipate further build-up (e.g., in light of EWIs).

Is reliable data available for assessments of the financial cycle?



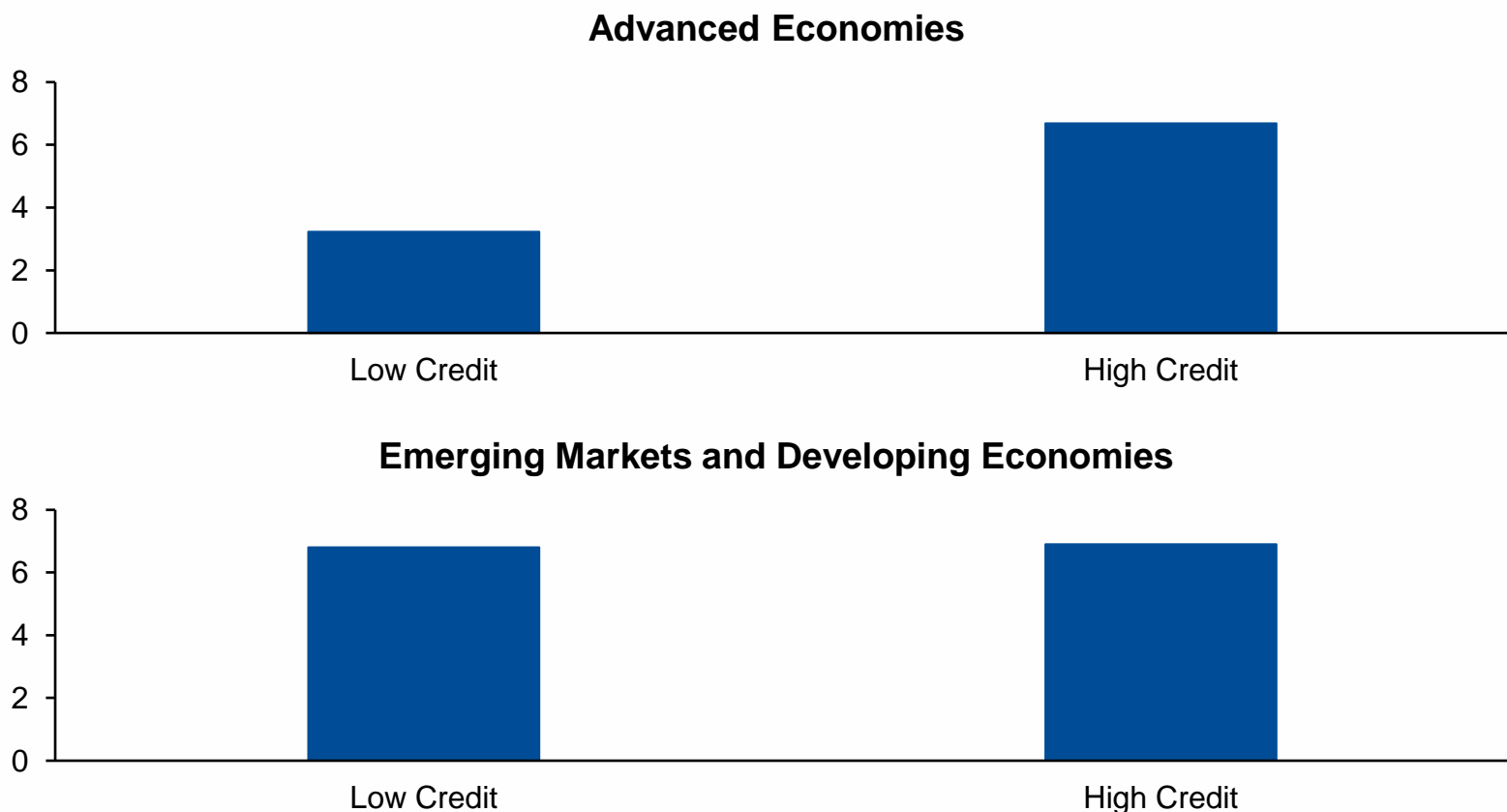
Assessing the Neutral Level can Key Off Historical Losses or Stress Tests.

- Can work off **historical losses** – examine past crises and recessions
 - ▶ Evaluate **peak losses** and make assumptions on pace of increase that makes it feasible to reach the peak, with neutral level as starting point (UK approach)
 - ▶ Evaluate historical losses **conditional** on **past credit growth** having been low or moderate (e.g., Behn and others, Scalone and others)
- Can assess expected losses based on **forward looking stress test** (e.g., Finland FSAP)
 - ▶ Can use a less severe scenario than what is used in standard solvency tests.
 - ▶ But: Hurdle rates should include other non-releasable buffers (CCoB and SRB)

Assessing the Neutral Level Should Consider Potential Sources of Vulnerability

- Assessment should evaluate **stock vulnerabilities**
 - ▶ Share of local currency debt at variable rates, or subject to repricing when monetary policy tightens.
 - ▶ Share of foreign currency debt
- Assessment should consider **exposure to external shocks**
 - ▶ Exposure of the economy to volatile commodity prices
 - ▶ Exposure of the economy to volatile capital flows
 - ▶ Pegs and other constraints on monetary policy.
- Small open economies and emerging and developing countries (EMDCs) that are vulnerable to external shocks may want to consider higher neutral rates.

Systemic Banking Crises: Peak Losses as a Share of RWA



Sources: IMF Financial Soundness Indicator; Laeven and Valencia (2020)

Note: Peak losses as a share of RWA are calculated as $(\text{Peak NPL} \times \text{Average Share of Total Gross Loans to RWA})$. The Average Share of Total Gross Loans to RWA is calculated as $(\text{Total Gross Loans} \times 15\%) / \text{RWA}$ for AEs and $(\text{Total Gross Loans} \times 25\%) / \text{RWA}$ for EMDEs. Latest observations for Total Gross Loans and RWA are used. Peak NPL is from Laeven and Valencia (2020). Total Gross Loans and RWA are from the IMF FSI. Countries are divided into low or high credit based on their maximum credit growth 1 to 5 years before the crisis.

Interactions with other buffers

Interaction with Other Buffer Requirements

- **Sectoral buffers**, such as sectoral systemic risk buffers (SRB), can complement the broad-based CCyB – e.g., SRB for exposures to real estate in Germany.
 - ▶ Sectoral buffers can provide incentives to shift away from risky exposures.
 - ▶ Such buffers can generate additional releasable capital in periods of stress – unlike risk-weights, which tend to be hard-wired.
- Care that releasability is not hampered by non-risk weighted requirements, such as **leverage ratio caps** or resolution requirements (TLAC).
 - ▶ Where risk-weight density is low, lending may be constrained by leverage ratio caps, rendering a release ineffective.
 - ▶ Where leverage requirements are binding, this can argue for higher positive neutral rates.

Interaction with Other Buffer Requirements

- Introduction of a positive neutral rate for the CCyB should maintain the **capital conservation buffer (CCoB)**.
 - ▶ CCoB remains mandated under Basel III and an important supervisory tool.
 - ▶ Outside of release phase, CCyB will add to CCoB, generating additional protections against weakness in individual institutions, and runs on such institutions.
- If **Pillar 2 capital buffer** requirements are driven in part by **macro stress tests**, these tests may want to assume release of CCyB.
 - ▶ A positive neutral CCyB would then lead to some reduction in the Pillar 2 capital buffer.
 - ▶ This avoids double-counting.

Conclusion

- A positive neutral CCyB rate is a key means to generate (much needed) releasable capital.
- Implementation should proceed irrespective of readings of the credit gap, unless conditions for release are met, or the system is otherwise capital constrained.
- A positive neutral CCyB is desirable even when monetary policy tightens, but the tightening should be conditioned on the absence of financial stress.
- The calibration of the appropriate level can be based on historical losses and stress tests, and should consider stock vulnerabilities and exposure to external shocks.
- For EMDCs, there should be (even) greater emphasis on neutral rates, relative to rates that respond to credit gaps.